CLAIMS

What is claimed is:

1. A power system comprising:

a housing with a chamber;

a member with an additional stored static electrical charge, the member is connected to the housing and extends at least partially across the chamber; and

a pair of electrodes connected to the housing, the pair of electrodes are spaced from and on substantially opposing sides of the member from each other and are at least partially in alignment with each other, wherein at least one of the member and one of the pair of electrodes is connected to the housing so that the wherein at least one of the member and one of the pair of electrodes is movable with respect to the other in response to a vibrational input.

2. The system as set forth in claim 1 wherein the member with the additional stored static electrical charge is a monopole structure.

3. The system as set forth in claim 1 wherein the additional stored static electrical charge is on the order of at least $1x10^{10}$ charges/cm^2.

4. The system as set forth in claim 1 wherein the pair of electrodes are held in a fixed spaced apart relationship and at least a portion of the member is movable with respect to the pair of electrodes.

5. The system as set forth in claim 4 wherein the member is connected by at least one resilient device to one of the pair of electrodes, the member is movable with respect to the one of the pair of electrodes.

6. The system as set forth in claim 4 wherein the member is connected to a movable base, at least one first resilient device is connected between movable base and one of the pair of electrodes, and at least one second

resilient device connected between the member the other one of the pair of electrodes.

7. The system as set forth in claim 1 wherein the member is held in a fixed, spaced apart relationship with respect to one of the pair of electrodes, the other one of the pair of electrodes is movable with respect to the member and the one of the pair of electrodes.

8. The system as set forth in claim 7 wherein the other one of the pair of electrodes is connected by at least one resilient device to a base.

9. The system as set forth in claim 7 wherein one end of the other one of the pair of electrodes is pivotally connected to the housing.

10. The system as set forth in claim 1 further comprising a load coupled to the pair of electrodes.

11. The system as set forth in claim 1 wherein the member comprises two or more dielectric layers and the additional stored static electrical charge is stored at an interface between the dielectric layers.

12. The system as set forth in claim 1 wherein the member comprises a single dielectric layer.

13. The system as set forth in claim 1 wherein the member is made from one or more materials selected from a group consisting of silicon oxide, silicon dioxide, silicon nitride, aluminum oxide, tantalum oxide, tantalum pentoxide, titanium oxide, titanium dioxide, barium strontium titanium oxide.

14. A method of making a power system, the method comprising:

providing a housing with a chamber;

providing a member with an additional stored static electrical charge, the member connected to the housing and extending at least partially across the chamber; and

providing a pair of electrodes connected to the housing, the pair of electrodes are spaced from and on substantially opposing sides of the member from each other and are at least partially in alignment with each other, wherein the member is movable with respect to the pair of electrodes or one of the pair of electrodes is movable with respect to the member.

15. The method as set forth in claim 14 wherein the member with the additional stored static electrical charge is a monopole structure.

16. The method as set forth in claim 14 wherein the additional stored static electrical charge is on the order of at least $1x10^{10}$ charges/cm^2.

17. The method as set forth in claim 14 wherein the pair of electrodes are held in a fixed spaced apart relationship and at least a portion of the member is movable with respect to the pair of electrodes.

18. The method as set forth in claim 17 wherein the member is connected by at least one resilient device to one of the pair of electrodes, the member is movable with respect to the one of the pair of electrodes.

19. The method as set forth in claim 17 wherein the member is connected to a movable base, at least one first resilient device is connected between movable base and one of the pair of electrodes, and at least one second resilient device connected between the member the other one of the pair of electrodes.

20. The method as set forth in claim 14 wherein the member is held in a fixed, spaced apart relationship with respect to one of the pair of electrodes, the other one of the pair of electrodes is movable with respect to the member and the one of the pair of electrodes.

21. The method as set forth in claim 20 wherein the other one of the pair of electrodes is connected by at least one resilient device to a base.

22. The method as set forth in claim 20 wherein one end of the other one of the pair of electrodes is pivotally connected to the housing.

23. The method as set forth in claim 14 further comprising providing a load coupled to the pair of electrodes.

24. The method as set forth in claim 14 wherein the member comprises two or more dielectric layers and the additional stored static electrical charge is stored at an interface between the dielectric layers.

25. The method as set forth in claim 14 wherein the member comprises a single dielectric layer.

26. The method as set forth in claim 14 wherein the member is made from one or more materials selected from a group consisting of silicon oxide, silicon dioxide, silicon nitride, aluminum oxide, tantalum oxide, tantalum pentoxide, titanium oxide, titanium dioxide, barium strontium titanium oxide.

27. A method for generating power, the method comprising:

moving a member with an additional stored static electrical charge with respect to at least one of a pair of electrodes or one of the pair of electrodes with respect to the member;

inducing a potential on the pair electrodes as a result of the moving; and

outputting the induced potential.

28. The method as set forth in claim 27 wherein the member with the additional stored static electrical charge is a monopole structure.

29. The method as set forth in claim 27 wherein the additional stored static electrical charge is on the order of at least $1x10^{10}$ charges/cm^2.

30. The method as set forth in claim 27 further comprising storing the outputted induced potential.

31. The method as set forth in claim 27 further comprising returning at least one of the member and one of the pair of electrodes towards an initial resting state after the moving with the resilient device.

32. The method as set forth in claim 27 wherein the member comprises two or more dielectric layers and the additional stored static electrical charge is stored at an interface between the dielectric layers.

33. The method as set forth in claim 27 wherein the member comprises a single dielectric layer.